Gaetano Lamberti

List of Publications by Year in descending order

144 papers	3,552 citations	126907 33 h-index	182427 51 g-index
146 all docs	146 docs citations	146 times ranked	3888 citing authors

#	Article	IF	Citations
1	Hydrogel-based commercial products for biomedical applications: A review. International Journal of Pharmaceutics, 2020, 573, 118803.	5.2	246
2	Hydrogels: experimental characterization and mathematical modelling of their mechanical and diffusive behaviour. Chemical Society Reviews, 2018, 47, 2357-2373.	38.1	172
3	Lipid Delivery Systems for Nucleic-Acid-Based-Drugs: From Production to Clinical Applications. Pharmaceutics, 2019, 11, 360.	4.5	105
4	Flow induced crystallisation of polymers. Chemical Society Reviews, 2014, 43, 2240-2252.	38.1	89
5	Intensifying the microencapsulation process: Ultrasonic atomization as an innovative approach. European Journal of Pharmaceutics and Biopharmaceutics, 2012, 80, 471-477.	4.3	88
6	Modeling the Drug Release from Hydrogel-Based Matrices. Molecular Pharmaceutics, 2015, 12, 474-483.	4.6	84
7	Controlled release from hydrogel-based solid matrices. A model accounting for water up-take, swelling and erosion. International Journal of Pharmaceutics, 2011, 407, 78-86.	5.2	75
8	Vitamin delivery: Carriers based on nanoliposomes produced via ultrasonic irradiation. LWT - Food Science and Technology, 2016, 69, 9-16.	5.2	73
9	Pharmaceutical applications of biocompatible polymer blends containing sodium alginate. Advances in Polymer Technology, 2012, 31, 219-230.	1.7	66
10	Analysis and modeling of swelling and erosion behavior for pure HPMC tablet. Journal of Controlled Release, 2007, 122, 181-188.	9.9	64
11	Carbon black/silicone rubber blends as absorbing materials to reduce Electro Magnetic Interferences (EMI). Polymer Bulletin, 2006, 57, 587-593.	3.3	63
12	Real-time orientation and crystallinity measurements during the isotactic polypropylene film-casting process. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 998-1008.	2.1	59
13	Controlled drug release from hydrogel-based matrices: Experiments and modeling. International Journal of Pharmaceutics, 2015, 486, 144-152.	5.2	59
14	Mathematical modeling of simultaneous drug release and in vivo absorption. International Journal of Pharmaceutics, 2011, 418, 130-141.	5.2	55
15	Measurement and modelling of the film casting process 1. Width distribution along draw direction. Chemical Engineering Science, 2001, 56, 5749-5761.	3.8	52
16	Combined convective and microwave assisted drying: Experiments and modeling. Journal of Food Engineering, 2012, 112, 304-312.	5.2	52
17	Polymer-lipid hybrid nanoparticles as enhanced indomethacin delivery systems. European Journal of Pharmaceutical Sciences, 2018, 121, 16-28.	4.0	49
18	Measurement and modelling of the film casting process. Chemical Engineering Science, 2002, 57, 1993-1996.	3.8	47

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19	Crystallinity and Linear Rheological Properties of Polymers. International Polymer Processing, 2007, 22, 303-310.	0.5	46
20	Liposomes as siRNA Delivery Vectors. Current Drug Metabolism, 2015, 15, 882-892.	1.2	46
21	Swelling of cellulose derivative (HPMC) matrix systems for drug delivery. Carbohydrate Polymers, 2009, 78, 469-474.	10.2	45
22	Modeling flow induced crystallization in film casting of polypropylene. Rheologica Acta, 2004, 43, 146-158.	2.4	43
23	Investigation of PluronicÂ© F127â€“Water solutions phase transitions by DSC and dielectric spectroscopy. Journal of Applied Polymer Science, 2009, 114, 688-695.	2.6	43
24	Enteric Micro-Particles for Targeted Oral Drug Delivery. AAPS PharmSciTech, 2010, 11, 1500-1507.	3.3	43
25	Supercritical fluid assisted production of HPMC composite microparticles. Journal of Supercritical Fluids, 2008, 46, 185-196.	3.2	40
26	Flowâ€induced crystallization during isotactic polypropylene film casting. Polymer Engineering and Science, 2011, 51, 851-861.	3.1	39
27	Modeling the interactions between light and crystallizing polymer during fast cooling. Applied Physics A: Materials Science and Processing, 2004, 78, 895-901.	2.3	38
28	A direct way to determine iPP density nucleation from DSC isothermal measurements. Polymer Bulletin, 2004, 52, 443-449.	3.3	38
29	PoroViscoElastic model to describe hydrogels' behavior. Materials Science and Engineering C, 2017, 76, 102-113.	7.3	37
30	Wet-granulation process: phenomenological analysis and process parameters optimization. Powder Technology, 2018, 340, 411-419.	4.2	36
31	Synthesis and characterization of P(MMA-AA) copolymers for targeted oral drug delivery. Polymer Bulletin, 2009, 62, 679-688.	3.3	35
32	Ultrasonic energy in liposome production: process modelling and size calculation. Soft Matter, 2014, 10, 2574.	2.7	35
33	PHEAâ€“PLA biocompatible nanoparticles by technique of solvent evaporation from multiple emulsions. International Journal of Pharmaceutics, 2015, 495, 719-727.	5.2	35
34	Hydrophilic drug encapsulation in shell-core microcarriers by two stage polyelectrolyte complexation method. International Journal of Pharmaceutics, 2017, 518, 50-58.	5.2	35
35	Polymerâ€“Lipid Pharmaceutical Nanocarriers: Innovations by New Formulations and Production Technologies. Pharmaceutics, 2021, 13, 198.	4.5	35
36	Orientation and crystallinity in film casting of polypropylene. Journal of Applied Polymer Science, 2002, 84, 1981-1992.	2.6	34

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37	On the Behavior of HPMC/Theophylline Matrices for Controlled Drug Delivery. Journal of Pharmaceutical Sciences, 2009, 98, 4100-4110.	3.3	34
38	Intensification of biopolymeric microparticles production by ultrasonic assisted atomization. Chemical Engineering and Processing: Process Intensification, 2009, 48, 1477-1483.	3.6	33
39	Physiologically Based Pharmacokinetics: A Simple, All Purpose Model. Industrial & Engineering Chemistry Research, 2010, 49, 2969-2978.	3.7	32
40	A general code to predict the drug release kinetics from different shaped matrices. European Journal of Pharmaceutical Sciences, 2009, 36, 359-368.	4.0	30
41	Effects of HPMC substituent pattern on water up-take, polymer and drug release: An experimental and modelling study. International Journal of Pharmaceutics, 2017, 528, 705-713.	5.2	29
42	The influence of dissolution conditions on the drug ADME phenomena. European Journal of Pharmaceutics and Biopharmaceutics, 2011, 79, 382-391.	4.3	28
43	Isotactic polypropylene crystallization: Analysis and modeling. European Polymer Journal, 2011, 47, 1097-1112.	5.4	28
44	Mechanics and transport phenomena in agarose-based hydrogels studied by compression-relaxation tests. Carbohydrate Polymers, 2017, 167, 136-144.	10.2	28
45	Micronutrients encapsulation in enhanced nanoliposomal carriers by a novel preparative technology. RSC Advances, 2019, 9, 19800-19812.	3.6	28
46	Drug release from matrix systems: analysis by finite element methods. Heat and Mass Transfer, 2012, 48, 519-528.	2.1	26
47	Novel Lipid and Polymeric Materials as Delivery Systems for Nucleic Acid Based Drugs. Current Drug Metabolism, 2015, 16, 427-452.	1.2	26
48	Biocompatible nano-micro-particles by solvent evaporation from multiple emulsions technique. Journal of Materials Science, 2014, 49, 5160-5170.	3.7	24
49	Evidences of flow induced crystallization during characterized film casting experiments. Macromolecular Symposia, 2002, 185, 167-180.	0.7	23
50	Analysis of film casting process: The heat transfer phenomena. Chemical Engineering and Processing: Process Intensification, 2005, 44, 1117-1122.	3.6	23
51	Crystallization during fast cooling experiments, a novel apparatus for real time monitoring. Macromolecular Symposia, 2002, 185, 181-196.	0.7	22
52	Anti-Osteoporotic Drug Release from Ordered Mesoporous Bioceramics: Experiments and Modeling. AAPS PharmSciTech, 2011, 12, 1193-1199.	3.3	22
53	Swellable Hydrogel-based Systems for Controlled Drug Delivery. , 0, , .		22
54	Definition and validation of a patient-individualized physiologically-based pharmacokinetic model. Computers and Chemical Engineering, 2016, 84, 394-408.	3.8	21

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55	Engineering approaches in siRNA delivery. International Journal of Pharmaceutics, 2017, 525, 343-358.	5.2	21
56	Therapeutic Potential of Nucleic Acid-Based Drugs in Coronary Hyper- Proliferative Vascular Diseases. Current Medicinal Chemistry, 2013, 20, 3515-3538.	2.4	21
57	Crystallization kinetics of iPP. Model and experiments. Polymer Bulletin, 2001, 46, 231-238.	3.3	20
58	Heat transfer and crystallization kinetics during fast cooling of thin polymer films. Heat and Mass Transfer, 2007, 43, 1143-1150.	2.1	20
59	Mathematical modelling of the drug release from an ensemble of coated pellets. British Journal of Pharmacology, 2017, 174, 1797-1809.	5.4	20
60	Determination of the release mechanism of Theophylline from pellets coated with Surelease Â® â€”A water dispersion of ethyl cellulose. International Journal of Pharmaceutics, 2017, 528, 345-353.	5.2	20
61	Design and production of hybrid nanoparticles with polymeric-lipid shellâ€“core structures: conventional and next-generation approaches. RSC Advances, 2018, 8, 34614-34624.	3.6	20
62	Measurements of water content in hydroxypropyl-methyl-cellulose based hydrogels via texture analysis. Carbohydrate Polymers, 2013, 92, 765-768.	10.2	19
63	Measurements of non-uniform water content in hydroxypropyl-methyl-cellulose based matrices via texture analysis. Carbohydrate Polymers, 2014, 103, 348-354.	10.2	19
64	Analysis of Film Casting Process:Â Effect of Cooling during the Path in Air. Industrial & Engineering Chemistry Research, 2006, 45, 719-723.	3.7	18
65	Modeling capillary formation in calcium and copper alginate gels. Materials Science and Engineering C, 2016, 58, 442-449.	7.3	18
66	Improved experimental characterization of crystallization kinetics. European Polymer Journal, 2005, 41, 2297-2302.	5.4	17
67	Microencapsulation effectiveness of small active molecules in biopolymer by ultrasonic atomization technique. Drug Development and Industrial Pharmacy, 2012, 38, 1486-1493.	2.0	17
68	Modeling of the reticulation kinetics of alginate/pluronic blends for biomedical applications. Materials Science and Engineering C, 2014, 37, 327-331.	7.3	17
69	Liposoluble vitamin encapsulation in shellâ€“core microparticles produced by ultrasonic atomization and microwave stabilization. LWT - Food Science and Technology, 2015, 64, 149-156.	5.2	17
70	HPMC granules by wet granulation process: Effect of vitamin load on physicochemical, mechanical and release properties. Carbohydrate Polymers, 2018, 181, 939-947.	10.2	17
71	A new method for on-line monitoring of non isothermal crystallization kinetics of polymers. Polymer Bulletin, 2002, 48, 207-212.	3.3	16
72	In vitrodissolution of pH sensitive microparticles for colon-specific drug delivery. Pharmaceutical Development and Technology, 2013, 18, 1399-1406.	2.4	16

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73	Modeling the modified drug release from curved shape drug delivery systems â€“ Dome MatrixÂ®. European Journal of Pharmaceutics and Biopharmaceutics, 2017, 121, 24-31.	4.3	16
74	Modelling of orange flower concrete fractionation by supercritical CO2. Journal of Supercritical Fluids, 1999, 14, 115-121.	3.2	15
75	Modeling the pharmacokinetics of extended release pharmaceutical systems. Heat and Mass Transfer, 2009, 45, 579-589.	2.1	15
76	Electrospinning of drugâ€loaded polymer systems: Preparation and drug release. Journal of Applied Polymer Science, 2011, 122, 3551-3556.	2.6	15
77	Ultrasonic atomization and polyelectrolyte complexation to produce gastroresistant shellâ€“core microparticles. Journal of Applied Polymer Science, 2016, 133, .	2.6	15
78	On the relevance of thermophysical characterization in the microwave treatment of legumes. Food and Function, 2018, 9, 1816-1828.	4.6	15
79	Modelling and simulation of the supercritical adsorption of complex terpene mixtures. Chemical Engineering Science, 1998, 53, 3537-3544.	3.8	14
80	Random l-lactide/Îµ-caprolactone copolymers as drug delivery materials. Journal of Materials Science, 2014, 49, 5986-5996.	3.7	14
81	Understanding the adhesion phenomena in carbohydrate-hydrogel-based systems: Water up-take, swelling and elastic detachment. Carbohydrate Polymers, 2015, 131, 41-49.	10.2	14
82	Importance of heat transfer phenomena during DSC polymer solidification. Heat and Mass Transfer, 2004, 41, 23-31.	2.1	13
83	Some issues on polymer crystallization kinetics studied by DSC non isothermal tests. Polymer Bulletin, 2006, 56, 591-598.	3.3	13
84	Coating of Nanolipid Structures by a Novel Simil-Microfluidic Technique: Experimental and Theoretical Approaches. Coatings, 2019, 9, 491.	2.6	13
85	Drug delivery from hydrogels: A general framework for the release modeling. Current Drug Delivery, 2016, 13, 1-1.	1.6	13
86	Single-Pot Semicontinuous Bench Scale Apparatus To Produce Microparticles. Industrial & Engineering Chemistry Research, 2014, 53, 2771-2780.	3.7	12
87	The rheological and crystallization behavior of polyoxymethylene. Polymer Testing, 2017, 57, 203-208.	4.8	12
88	Polymeric and lipid-based systems for controlled drug release: an engineering point of view. , 2019, , 267-304.		12
89	Dielectric properties of pineapple as function of temperature and water content. International Journal of Food Science and Technology, 2013, 48, 1334-1338.	2.7	11
90	Microwave Treatments of Cereals: Effects on Thermophysical and Parenchymal-Related Properties. Foods, 2020, 9, 711.	4.3	11

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91	New Preparative Approaches for Micro and Nano Drug Delivery Carriers. Current Drug Delivery, 2016, 13, 1-13.	1.6	11
92	In vitro simulation of drug intestinal absorption. International Journal of Pharmaceutics, 2012, 439, 165-168.	5.2	10
93	Gastrointestinal behavior and ADME phenomena: I. InÂvitro simulation. Journal of Drug Delivery Science and Technology, 2016, 35, 272-283.	3.0	10
94	Central composite design in HPMC granulation and correlations between product properties and process parameters. New Journal of Chemistry, 2017, 41, 6504-6513.	2.8	10
95	A physiologically-based model to predict individual pharmacokinetics and pharmacodynamics of remifentanil. European Journal of Pharmaceutical Sciences, 2018, 111, 20-28.	4.0	10
96	Modeling the mechanics and the transport phenomena in hydrogels. Computer Aided Chemical Engineering, 2018, 42, 357-383.	0.5	10
97	Drug Delivery of siRNA Therapeutics. Pharmaceutics, 2020, 12, 178.	4.5	10
98	Drug release from hydrogel-based matrix systems partially coated: experiments and modeling. Journal of Drug Delivery Science and Technology, 2021, 61, 102146.	3.0	10
99	In Vitro Simulation of Human Digestion: Chemical and Mechanical Behavior. Dissolution Technologies, 2016, 23, 16-23.	0.6	10
100	Orientation and Crystallinity Measurements in Injection Moulded Products. Polymer Bulletin, 2003, 50, 405-411.	3.3	9
101	Parametric simulation of drug release from hydrogel-based matrices. Journal of Pharmacy and Pharmacology, 2011, 64, 48-51.	2.4	9
102	In situ coronary stent paving by <scp>P</scp>luronic <scp>F</scp>127â€“alginate gel blends: Formulation and erosion tests. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2016, 104, 1013-1022.	3.4	9
103	Gastrointestinal behavior and ADME phenomena: II. In silico simulation. Journal of Drug Delivery Science and Technology, 2016, 35, 165-171.	3.0	9
104	Mimicking the contractions of a human stomach and their effect on pharmaceuticals. Journal of Drug Delivery Science and Technology, 2017, 41, 454-461.	3.0	9
105	Advances in Nanoliposomes Production for Ferrous Sulfate Delivery. Pharmaceutics, 2020, 12, 445.	4.5	9
106	Simil-Microfluidic Nanotechnology in Manufacturing of Liposomes as Hydrophobic Antioxidants Skin Release Systems. Cosmetics, 2020, 7, 22.	3.3	9
107	A physiologically oriented mathematical model for the description of in vivo drug release and absorption. ADMET and DMPK, 2014, 2, .	2.1	9
108	Orientation and Crystallinity Measurements in Film Casting Products. Polymer Bulletin, 2003, 50, 413-420.	3.3	8

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109	Preliminary validation of a numerical code for heat transfer simulations. Heat and Mass Transfer, 2003, 39, 429-433.	2.1	8
110	Microwave assisted drying of banana: effects on reducing sugars and polyphenols contents. Czech Journal of Food Sciences, 2014, 32, 369-375.	1.2	8
111	Encapsulation of Active Molecules in Microparticles Based on Natural Polysaccharides. Natural Product Communications, 2017, 12, 1934578X1701200.	0.5	8
112	Mechanics and drug release from poroviscoelastic hydrogels: Experiments and modeling. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 152, 299-306.	4.3	8
113	Engineering approaches for drug delivery systems production and characterization. International Journal of Pharmaceutics, 2020, 581, 119267.	5.2	8
114	Cyclin D1 Gene Silencing by siRNA in ex vivo human tissue cultures. Current Drug Delivery, 2016, 13, 1-1.	1.6	8
115	How mathematical modeling tools are helping the pharmaceutical sciences. International Journal of Pharmaceutics, 2015, 496, 157-158.	5.2	6
116	Effect of binder and load solubility properties on HPMC granules produced by wet granulation process. Journal of Drug Delivery Science and Technology, 2019, 49, 513-520.	3.0	6
117	Gelation process of carboxymethyl chitosan-zinc supramolecular hydrogel studied with fluorescence imaging and mathematical modelling. International Journal of Pharmaceutics, 2021, 605, 120804.	5.2	6
118	Interaction between light and crystallizing polymer: a simulation study. European Polymer Journal, 2005, 41, 2055-2066.	5.4	5
119	A PSE approach to patient-individualized physiologically-based pharmacokinetic modeling. Computer Aided Chemical Engineering, 2015, , 77-84.	0.5	5
120	Injectable Chitosan/B-Glycerophosphate System for Sustained Release: Gelation Study, Structural Investigation, and Erosion Tests. Current Drug Delivery, 2016, 13, 1-1.	1.6	5
121	Pharmacokinetics of Remifentanil: a three-compartmental modeling approach. Translational Medicine @ UniSa, 2013, 7, 18-22.	0.5	5
122	A low-cost pushâ€“pull syringe pump for continuous flow applications. HardwareX, 2022, 11, e00295.	2.2	5
123	The effect of liver esterases and temperature on remifentanil degradation in vitro. International Journal of Pharmaceutics, 2016, 510, 359-364.	5.2	4
124	Chemical Engineering in the â€œBIOâ€•world. Current Drug Delivery, 2016, 13, 1-1.	1.6	4
125	Process validation of the normalized rheological function behavior during polymer crystallization. Rheologica Acta, 2012, 51, 259-265.	2.4	3
126	Iron Chelates: Production Processes and Reaction Evolution Analysis. Chemical Engineering Communications, 2016, 203, 861-869.	2.6	3

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127	HPMC-based granules for prolonged release of phytostrengtheners in agriculture. Chemical Engineering Communications, 2017, 204, 1333-1340.	2.6	3
128	An Engineering Point of View on the Use of the Hydrogels for Pharmaceutical and Biomedical Applications. , 2016, , .		2
129	On the design of tailored liposomes for KRX29 peptide delivery. New Journal of Chemistry, 2017, 41, 11280-11290.	2.8	2
130	Thermal gelation modeling of a pluronicâ€alginate blend following coronary angioplasty. Journal of Applied Polymer Science, 2020, 137, 48539.	2.6	2
131	Nanoliposomes in polymeric granules: Novel process strategy to produce stable and versatile delivery systems. Journal of Drug Delivery Science and Technology, 2020, 59, 101878.	3.0	2
132	Electrospinning of drug-loaded polymer systems: preparation, characterization and drug release. , 2010, , .		1
133	Polymers in life sciences: Pharmaceutical and biomedical applications. AIP Conference Proceedings, 2015, , .	0.4	1
134	Inside the Phenomenological Aspects of Wet Granulation: Role of Process Parameters. , 0, , .		1
135	Dynamometric measurements of hydrogels' mechanical spectra. Journal of Applied Polymer Science, 2021, 138, 50702.	2.6	1
136	An engineering approach to biomedical sciences: advanced testing methods and pharmacokinetic modeling. Translational Medicine @ UniSa, 2012, 4, 34-8.	0.5	1
137	siRNA Delivery for Control of Cyclin D1 and E2F1 Expression in Crohn's Disease. Translational Medicine @ UniSa, 2017, 17, 25-33.	0.5	1
138	Delivery of siRNAs. International Journal of Pharmaceutics, 2017, 525, 291-292.	5.2	0
139	P.05.4: Cancer Progression Control in Inflammatory Bowel Disease: Cyclin D1 and E2F1 Sirna Delivery by New Vectors. Digestive and Liver Disease, 2017, 49, e157.	0.9	0
140	Modeling of the Behavior of Natural Polysaccharides Hydrogels for Bio-pharma Applications. Natural Product Communications, 2017, 12, 1934578X1701200.	0.5	0
141	Phenomenological and Formulation Aspects in Tailored Nanoliposome Production. , 0, , .		0
142	siRNA Delivery for Control of Cyclin D1 and E2F1 Expression in Crohn's Disease. Translational Medicine @ UniSa, 2017, 17, 22-30.	0.5	0
143	Hydration, Swelling, Erosion And Drug Release From HPMC And HPMC/TP Matrices. , 0, , 109-116.		0
144	Editorial: New Trends in Gene Therapy: Multidisciplinary Approaches to siRNAs Controlled Delivery. Current Drug Delivery, 2017, 14, 156-157.	1.6	0